YOU FOR YOUTH

Project-Based Learning
Phase I: Designing and Developing

Virtual Learning Series
October 19, 2016

DISCLAIMER

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YOUR FACILITATORS

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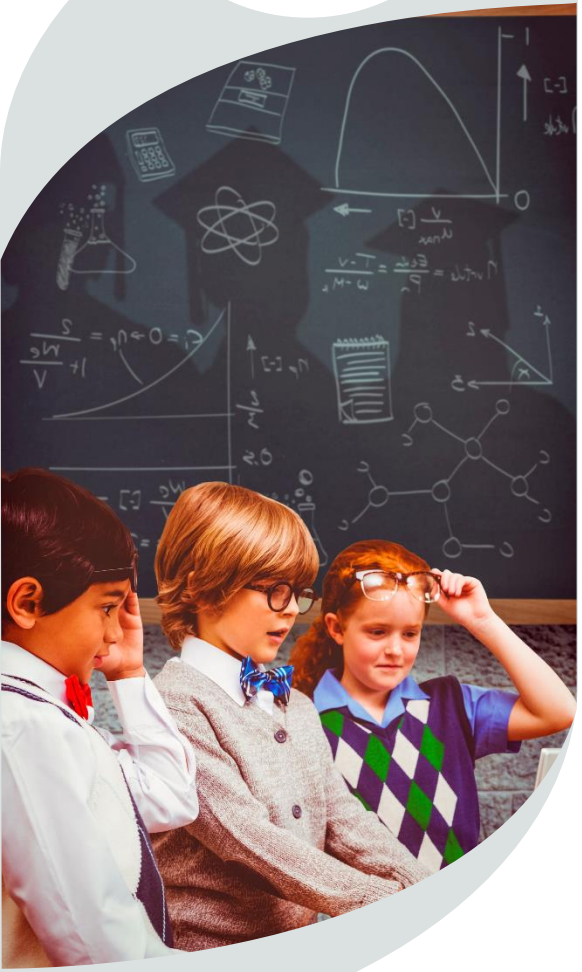
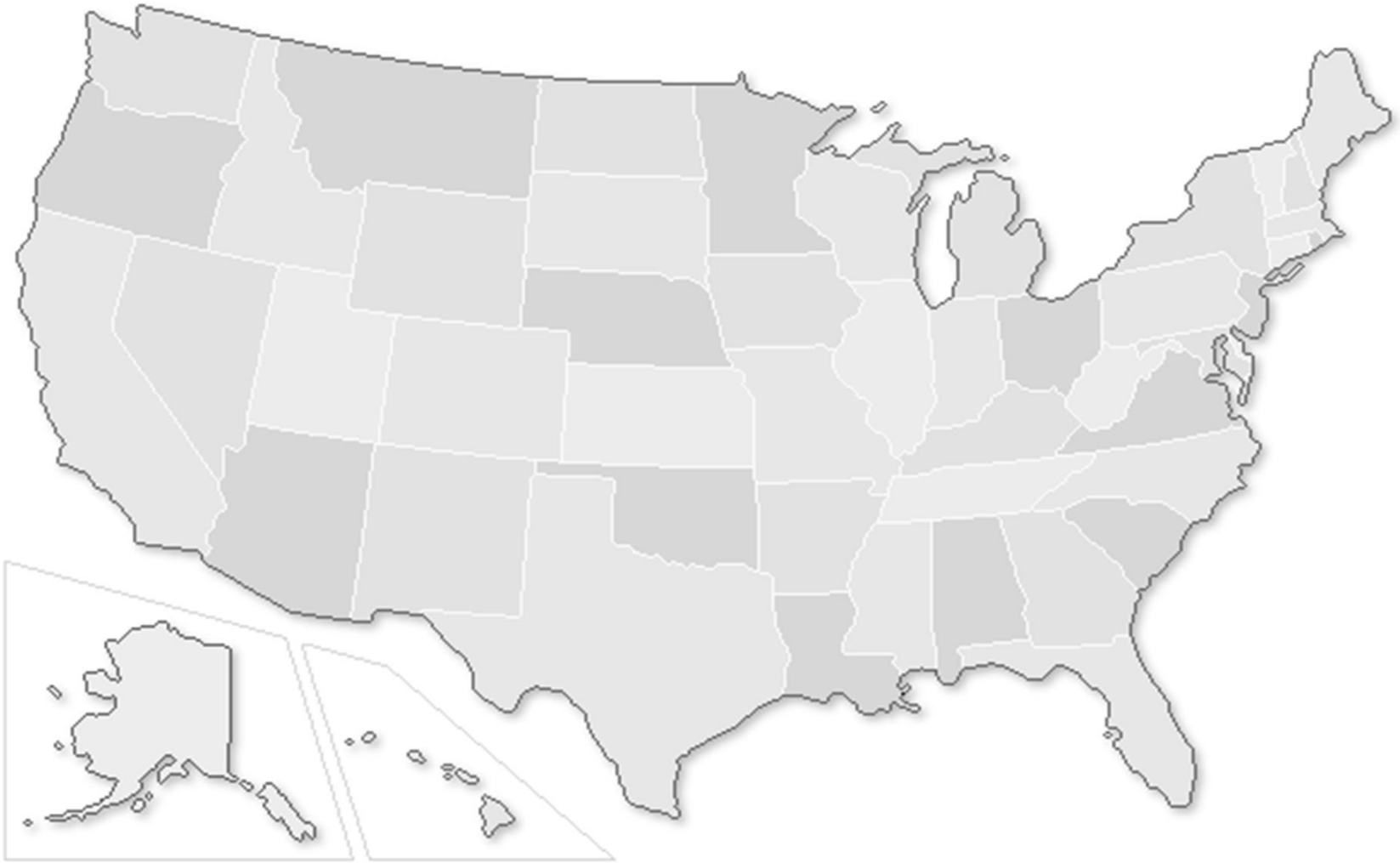
Education Specialist

YOU FOR YOUTH

TELL US WHERE YOU ARE





POLLS

Please respond to each of the following:

What is your role?

- Project Director
- Site Coordinator
- Front Line Staff
- Other

What grade levels to you serve?

- K-5
- 6-8
- 8-12

How many years have you worked in out-of-school time?

- 0-3
- 4-6
- 7+

What is your experience working with project-based learning?

- I have a lot of experience
- I have some experience
- I have little or no experience

AGENDA: WHAT TO EXPECT

- Four live webinars
- Interactive sessions
  - Discussion Board: Office hours from 2 PM-3 PM Eastern
  - Podcasts
- Links to Y4Y resources
- Peer networking
- Certificate of Completion

  Participate in at least 3 of the 4 webinars and complete the online Project-Based Learning Course

HOUSEKEEPING

- Tell us if you are sharing a computer
- Your questions
- Chat box
- Web recording

SESSION OBJECTIVES

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- Define project-based learning (PBL)
- Explore how PBL benefits students
- Outline the components in Phase I
- Practice mapping as a brainstorming strategy

WHAT IS PROJECT-BASED LEARNING?

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- In-depth study of real-world topic or problem
- Realistic learning environment
- Directed by students and hands-on
- Focuses on DOING
- Project shared with an audience
- Aligned with the school day

VARIATIONS OF PROJECT-BASED LEARNING

Service Learning

focus on improving the community

Civic Learning and Engagement

focus on engaging as active citizens to address community issues

BENEFITS FOR STUDENTS

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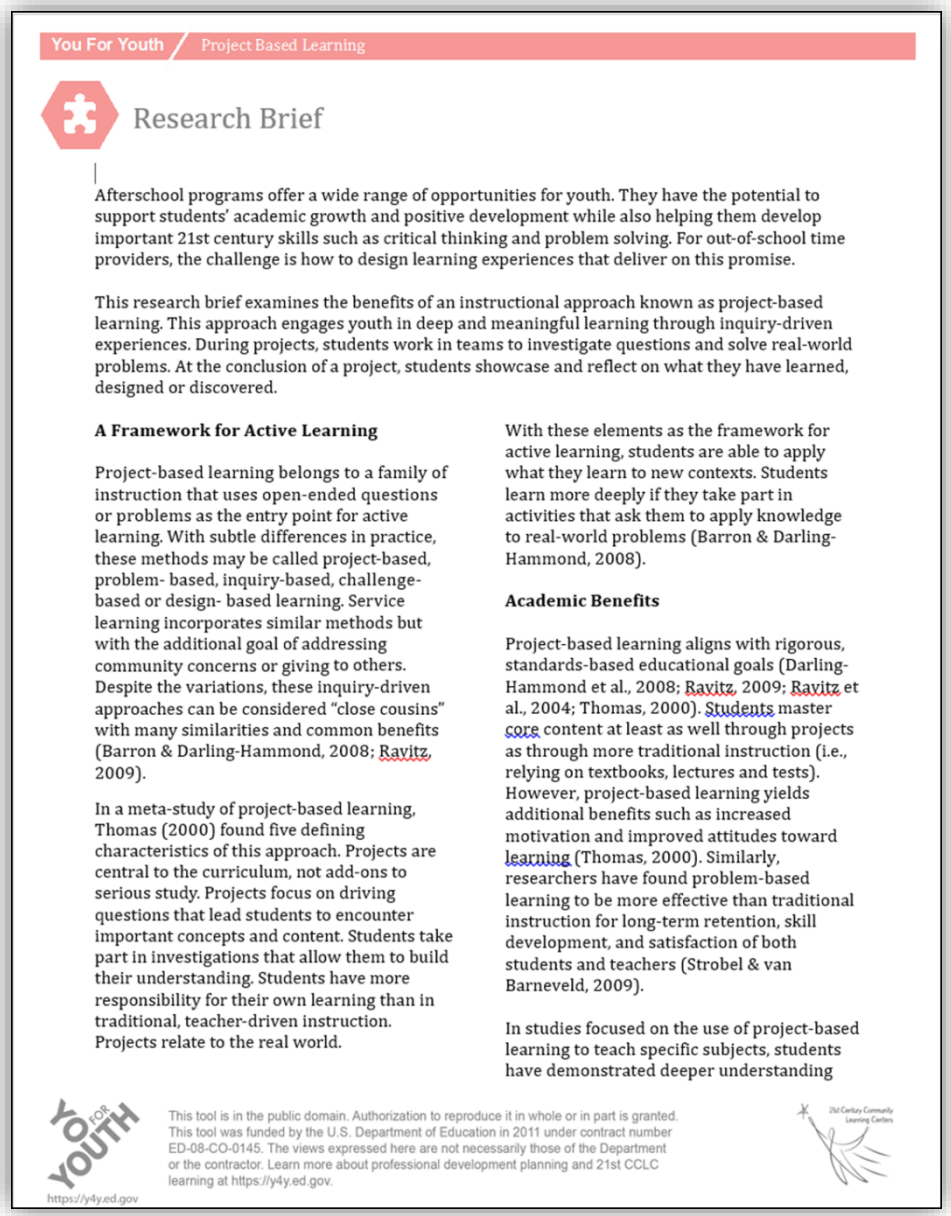
Student Benefits
Increases motivation, engagement, and achievement
Fosters student ownership
Grows 21st Century skills
Successful with all learning styles

TOOL



You For Youth / Project Based Learning

Research Brief

Afterschool programs offer a wide range of opportunities for youth. They have the potential to support students' academic growth and positive development while also helping them develop important 21st century skills such as critical thinking and problem solving. For out-of-school time providers, the challenge is how to design learning experiences that deliver on this promise.

This research brief examines the benefits of an instructional approach known as project-based learning. This approach engages youth in deep and meaningful learning through inquiry-driven experiences. During projects, students work in teams to investigate questions and solve real-world problems. At the conclusion of a project, students showcase and reflect on what they have learned, designed or discovered.

A Framework for Active Learning

Project-based learning belongs to a family of instruction that uses open-ended questions or problems as the entry point for active learning. With subtle differences in practice, these methods may be called project-based, problem- based, inquiry-based, challenge-based or design- based learning. Service learning incorporates similar methods but with the additional goal of addressing community concerns or giving to others. Despite the variations, these inquiry-driven approaches can be considered "close cousins" with many similarities and common benefits (Barron & Darling-Hammond, 2008; Ravitz, 2009).

In a meta-study of project-based learning, Thomas (2000) found five defining characteristics of this approach. Projects are central to the curriculum, not add-ons to serious study. Projects focus on driving questions that lead students to encounter important concepts and content. Students take part in investigations that allow them to build their understanding. Students have more responsibility for their own learning than in traditional, teacher-driven instruction. Projects relate to the real world.

With these elements as the framework for active learning, students are able to apply what they learn to new contexts. Students learn more deeply if they take part in activities that ask them to apply knowledge to real-world problems (Barron & Darling-Hammond, 2008).

Academic Benefits

Project-based learning aligns with rigorous, standards-based educational goals (Darling-Hammond et al., 2008; Ravitz, 2009; Ravitz et al., 2004; Thomas, 2000). Students master core content at least as well through projects as through more traditional instruction (i.e., relying on textbooks, lectures and tests). However, project-based learning yields additional benefits such as increased motivation and improved attitudes toward learning (Thomas, 2000). Similarly, researchers have found problem-based learning to be more effective than traditional instruction for long-term retention, skill development, and satisfaction of both students and teachers (Strobel & van Barneveld, 2009).

In studies focused on the use of project-based learning to teach specific subjects, students have demonstrated deeper understanding

https://y4y.ed.gov

Project Based Learning / Tools

WHY IS PROJECT-BASED LEARNING IMPORTANT?

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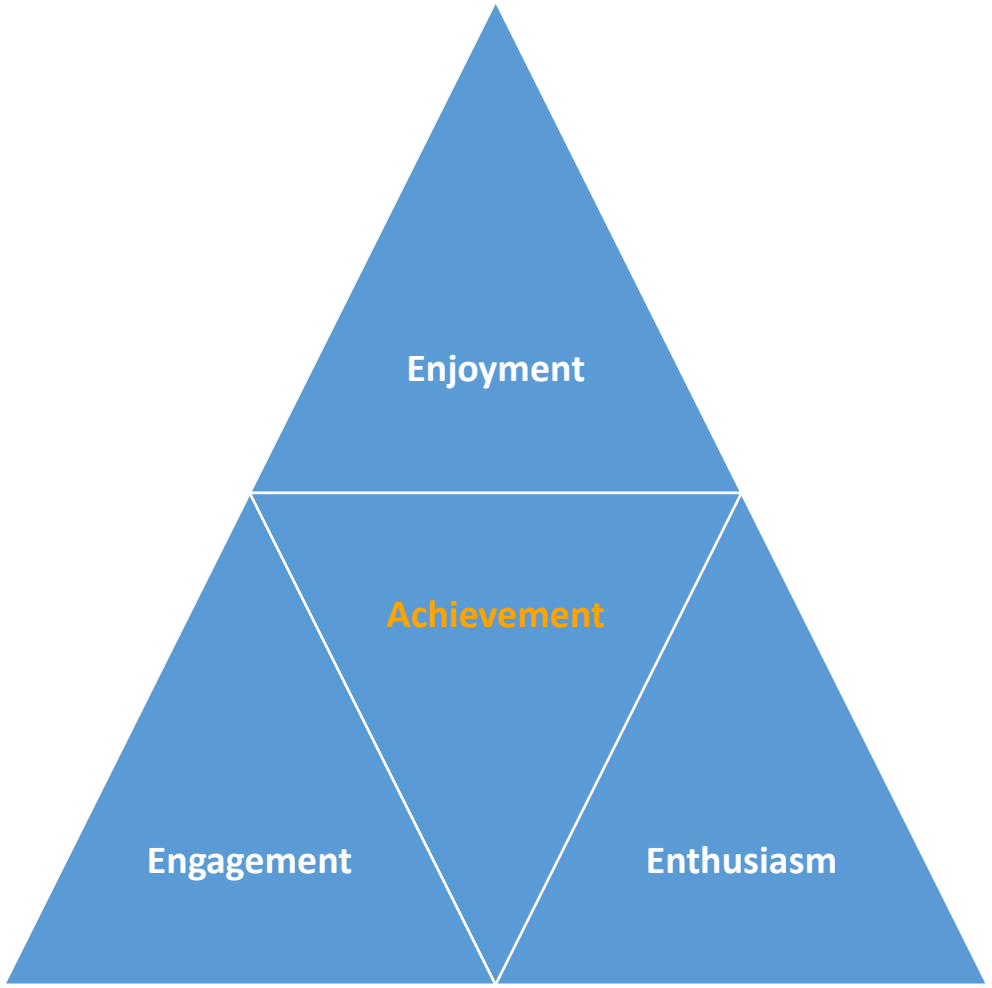
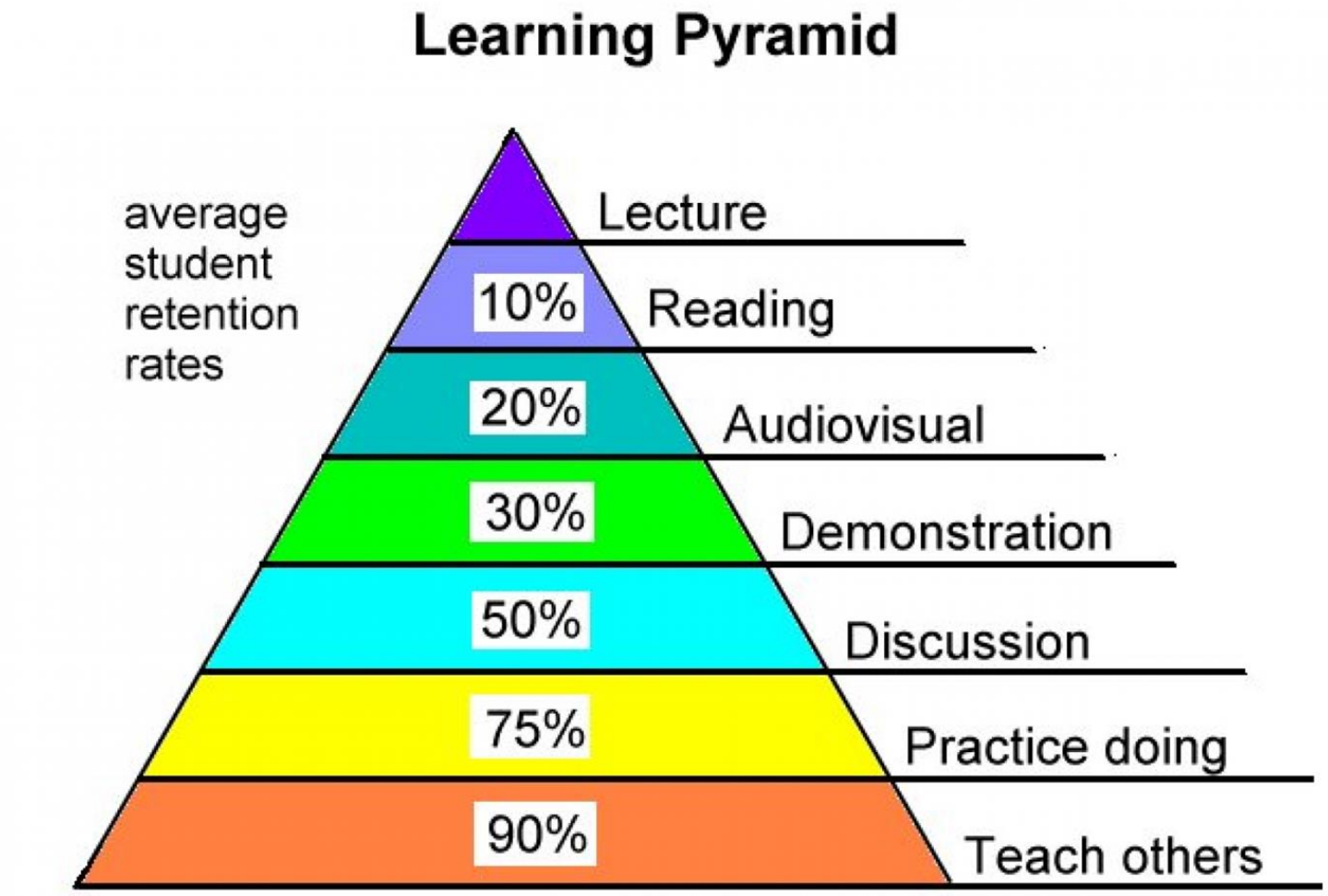
"It is how we encourage gifted behavior." Joseph Renzulli



YOU FOR YOUTH

HOW DO WE LEARN?



Source: National Training Laboratories, Bethel, Maine

PBL DOESN'T HAVE TO BE ROCKET SCIENCE

Example: Five Year-Olds Pilot Their Own Learning Tools/ Learn More Library/ External Videos

SIX As OF QUALITY PROJECT-BASED LEARNING

YOU FOR YOUTH

Authenticity

Academic Rigor

Adult Relationships

Applied Learning

Active Exploration

Assessment

AUTHENTICITY

- Values student voice and choice
- Uses real-world context
- Uses tools and resources from career field
- Results in a product and/or performance that has meaning to the student or has social value

AUTHENTICITY

	Not Authentic	Somewhat Authentic	Truly Authentic
Characteristics	• Does not resemble work done in the real world • Doesn't have a goal to answer a question or solve a problem • Product isn't intended to be shared with an audience	• Not realistic, but the environment may resemble real-world work environment • Students may play roles of actual workers in field (e.g. reporter, photographer, scientist) • Product may not be intended to be used by anyone	• Work is real to students • Project is relevant to their lives • There will be a direct impact or will be useful to someone or something in the real world
Examples	Students are asked to act out a story and they present it to their parents.	Students are in an industrial kitchen, they are playing roles of chefs, sous chefs, wait staff. They may even make dinner for their peers or their family, however, the product lacks the solving of any problem or the persuasion to make a change.	As USDA inspectors, animal advocates, or nutritionists, students develop a plan for healthier lunch menus at their school and present it to their food service department and to their board.

POLL: WHICH ONE IS TRULY AUTHENTIC?

1. Students learn about endangered species in their region and take action to protect them. They create a public awareness campaign, do habitat restoration fieldwork and communicate with local government officials.

2. Students design and create a calendar with pictures and information about endangered species. They sell the calendars at a community event and donate the money to an environmental organization.

3. Students play the roles of scientists who need to make recommendations to an environmental organization about how to protect endangered species in various ecosystems around the world.

Source: http://www.edutopia.org/blog/authentic-project-based-learning-john-larmer

THREE PHASES OF PROJECT-BASED LEARNING

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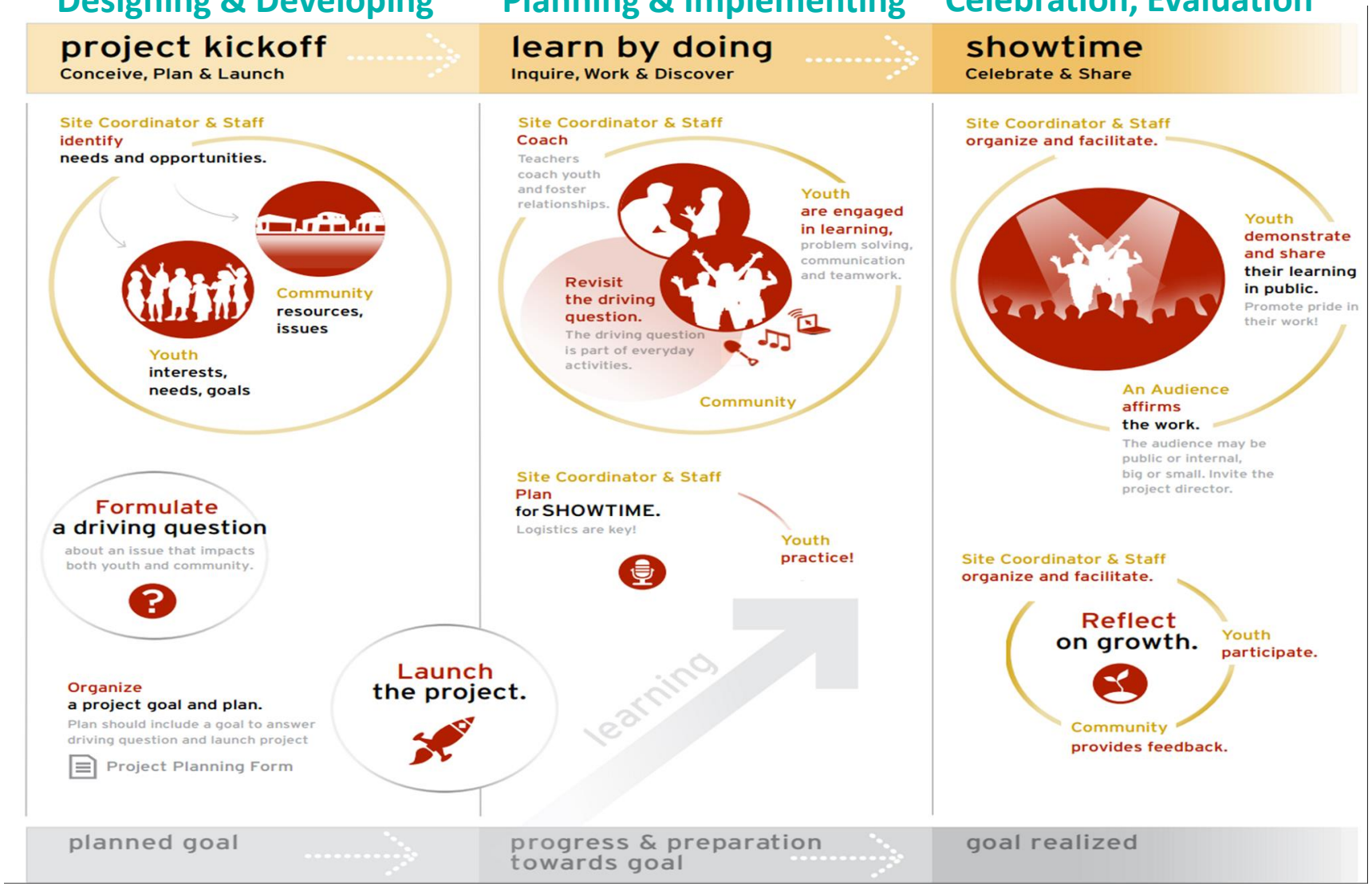

PHASE I – DESIGNING AND DEVELOPING

1. Determine student interest and schedule activities.
2. Introduce the topic.
3. Map what you know.
4. Map what you wonder.
5. Develop the driving question.

DETERMINE STUDENT INTEREST

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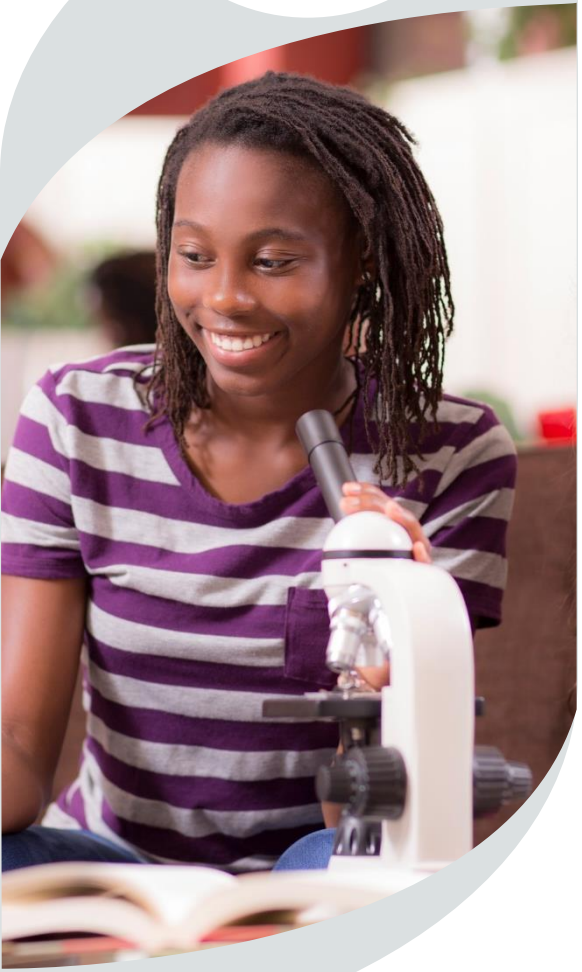
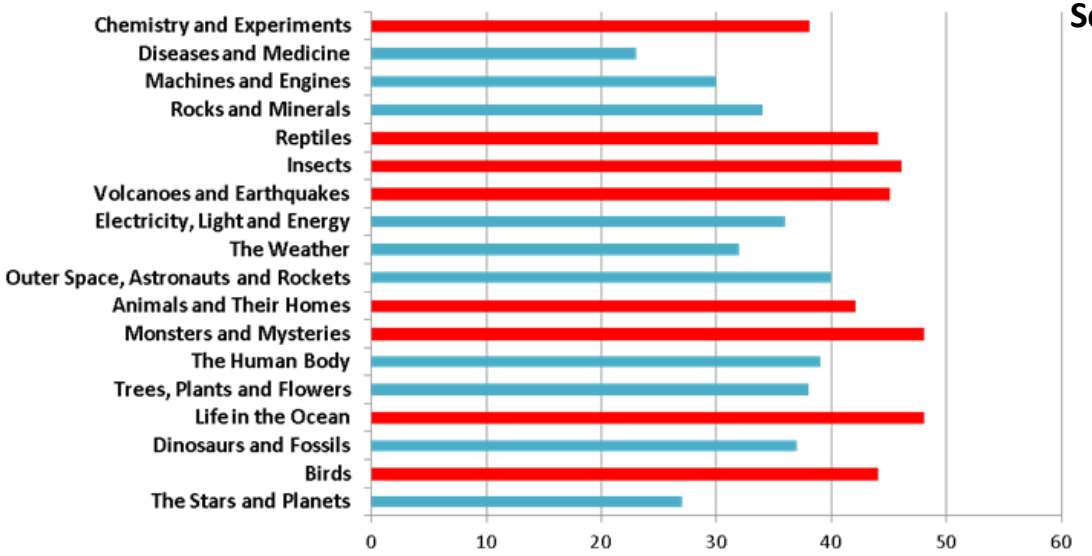
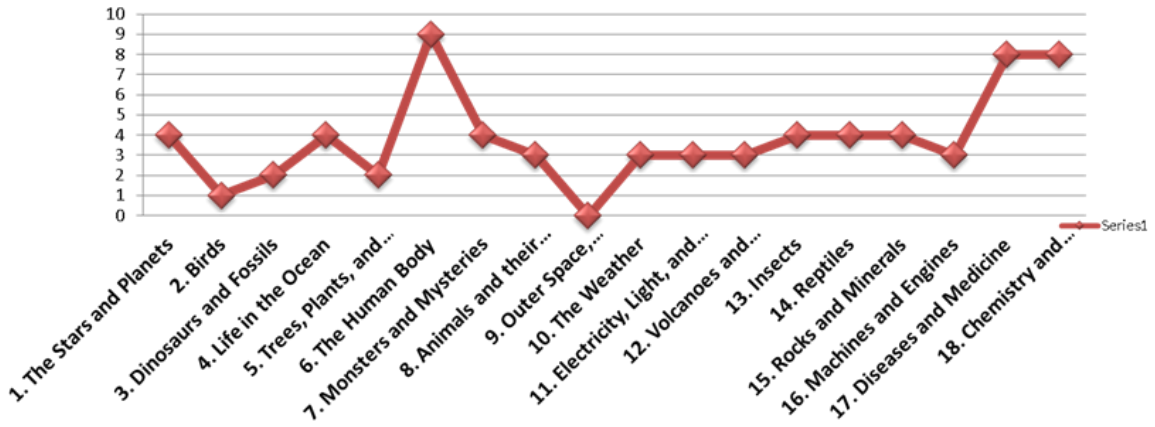


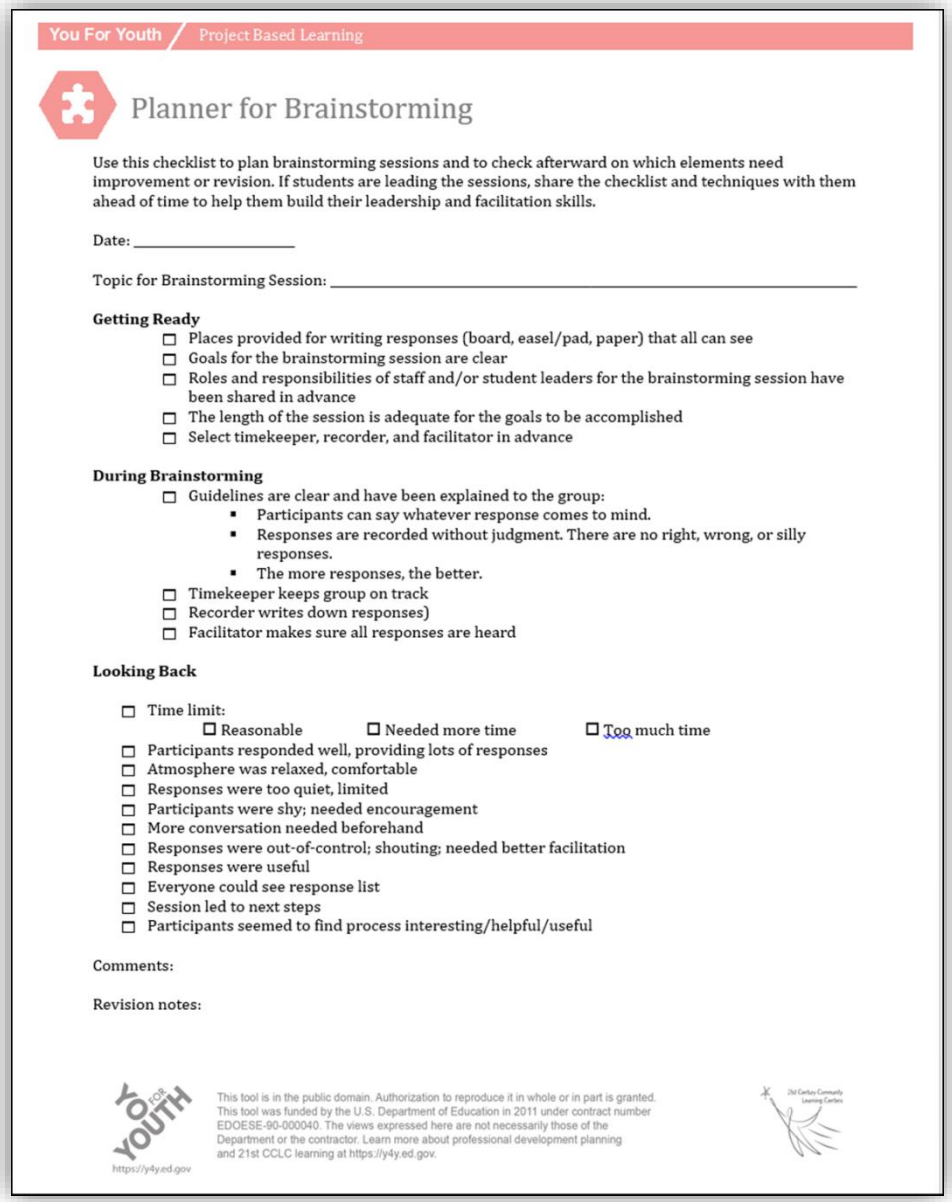


Science Elementary

Science Middle School



PLANNER FOR BRAINSTORMING



You For Youth / Project Based Learning

Planner for Brainstorming

Use this checklist to plan brainstorming sessions and to check afterward on which elements need improvement or revision. If students are leading the sessions, share the checklist and techniques with them ahead of time to help them build their leadership and facilitation skills.

Date: _____

Topic for Brainstorming Session: _____

Getting Ready

- ☐ Places provided for writing responses (board, easel/pad, paper) that all can see
- ☐ Goals for the brainstorming session are clear
- ☐ Roles and responsibilities of staff and/or student leaders for the brainstorming session have been shared in advance
- ☐ The length of the session is adequate for the goals to be accomplished
- ☐ Select timekeeper, recorder, and facilitator in advance

During Brainstorming

- ☐ Guidelines are clear and have been explained to the group:
  - Participants can say whatever response comes to mind.
  - Responses are recorded without judgment. There are no right, wrong, or silly responses.
  - The more responses, the better.
- ☐ Timekeeper keeps group on track
- ☐ Recorder writes down responses)
- ☐ Facilitator makes sure all responses are heard

Looking Back

- ☐ Time limit:
  - ☐ Reasonable ☐ Needed more time ☐ Too much time
- ☐ Participants responded well, providing lots of responses
- ☐ Atmosphere was relaxed, comfortable
- ☐ Responses were too quiet, limited
- ☐ Participants were shy; needed encouragement
- ☐ More conversation needed beforehand
- ☐ Responses were out-of-control; shouting; needed better facilitation
- ☐ Responses were useful
- ☐ Everyone could see response list
- ☐ Session led to next steps
- ☐ Participants seemed to find process interesting/helpful/useful

Comments:

Revision notes:

PBL/Tools/Planner for Brainstorming

DECIDE ON ACTIVITIES

YOU FOR YOUTH

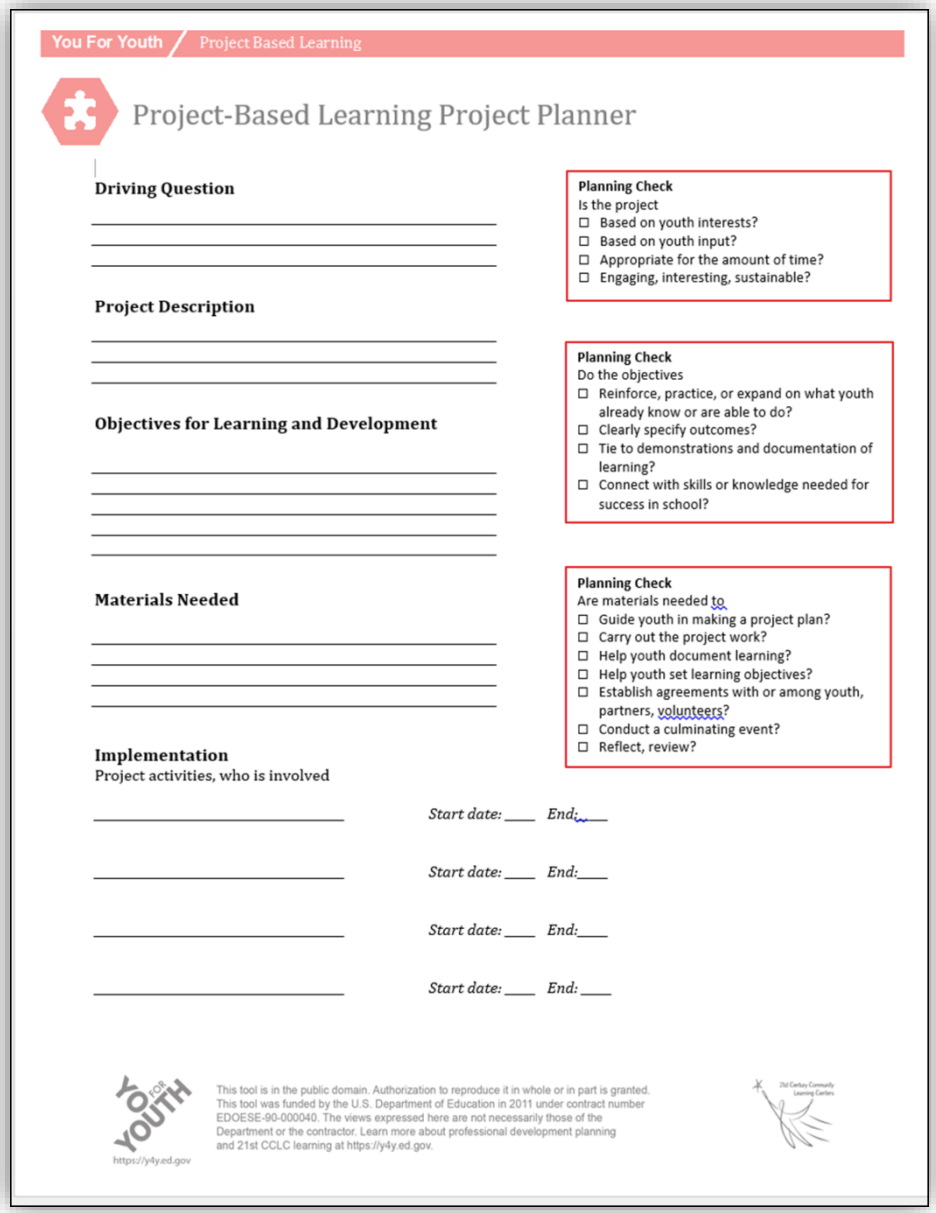
What's Bugging You?
Come explore the wide world of insects. Discover why they exist, where they live, and how to keep them from "bugging" you.

Trash to Treasure
There is no such thing as garbage! Everything can be reused if we use our imagination. Come to this cluster and discover how you can turn common trash into art.

CSI, Cemetery Scene Investigation
Cemeteries aren't scary — they are a walk through history. Join us in this cluster as we investigate the wealth of information hidden in your local cemetery.

Earth Moved
Why is the weather changing? Why are there so many natural disasters lately? If these are questions you have, join us in this cluster to explore the mystery and discover ways you can prepare and help.

PROJECT-BASED LEARNING PROJECT PLANNER



You For Youth / Project Based Learning

Project-Based Learning Project Planner

Driving Question

_____
_____
_____

Planning Check
Is the project
- ☐ Based on youth interests?
- ☐ Based on youth input?
- ☐ Appropriate for the amount of time?
- ☐ Engaging, interesting, sustainable?

Project Description

_____
_____
_____

Planning Check
Do the objectives
- ☐ Reinforce, practice, or expand on what youth already know or are able to do?
- ☐ Clearly specify outcomes?
- ☐ Tie to demonstrations and documentation of learning?
- ☐ Connect with skills or knowledge needed for success in school?

Objectives for Learning and Development

_____
_____
_____
_____
_____

Planning Check
Are materials needed to
- ☐ Guide youth in making a project plan?
- ☐ Carry out the project work?
- ☐ Help youth document learning?
- ☐ Help youth set learning objectives?
- ☐ Establish agreements with or among youth, partners, volunteers?
- ☐ Conduct a culminating event?
- ☐ Reflect, review?

Materials Needed

_____
_____
_____
_____

Implementation
Project activities, who is involved

_____ *Start date:* ___ *End:*___

_____ *Start date:* ___ *End:*___

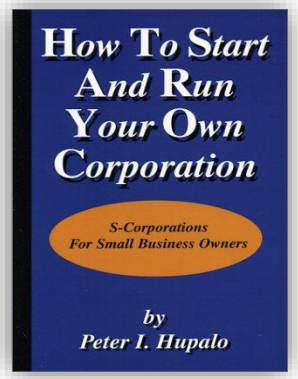
_____ *Start date:* ___ *End:*___

_____ *Start date:* ___ *End:* ___

PBL/Tools/Project Planner

INTRODUCE THE TOPIC

- Guest speakers
- Group Discussions
- Idea boxes
- Videos
- Books
- Authentic tools



MAPPING

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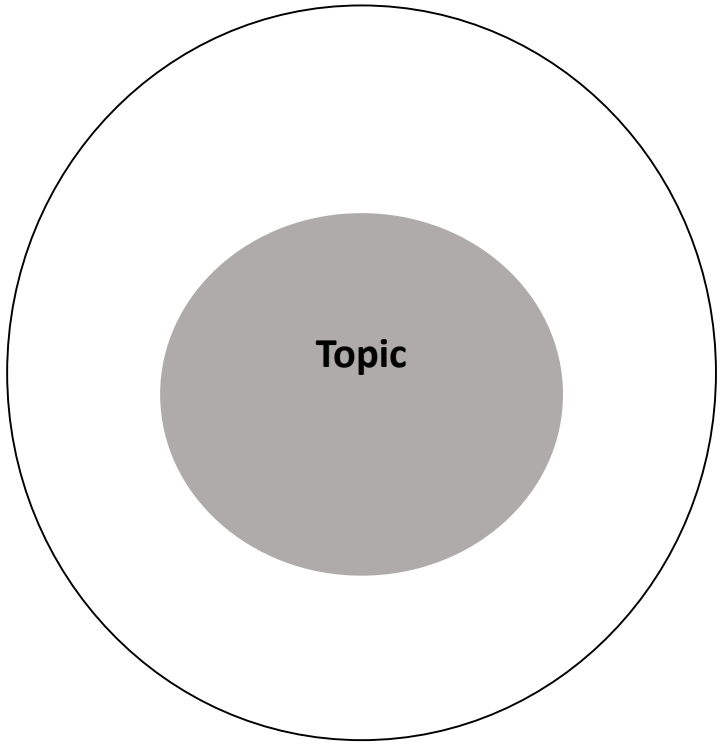
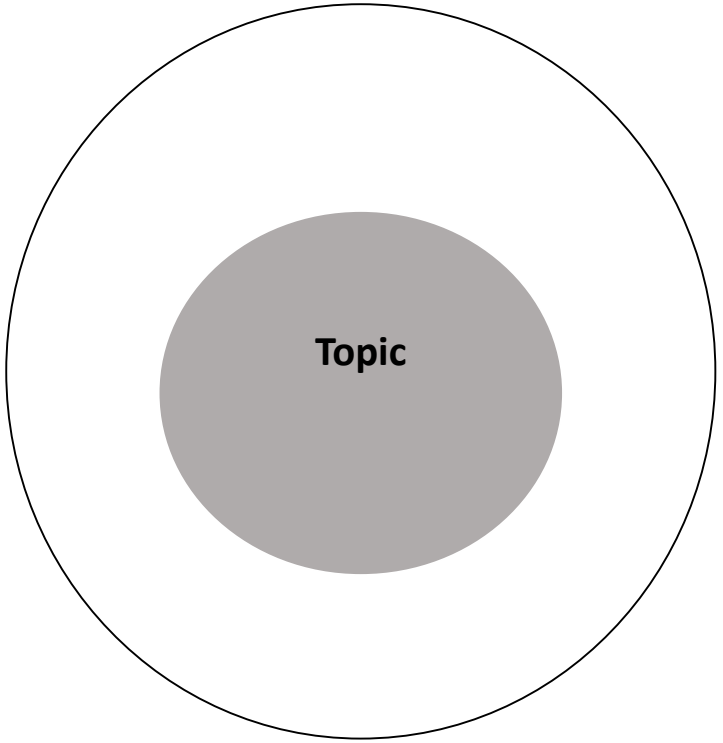
Map What You Know



Map What You Wonder/Need to Know



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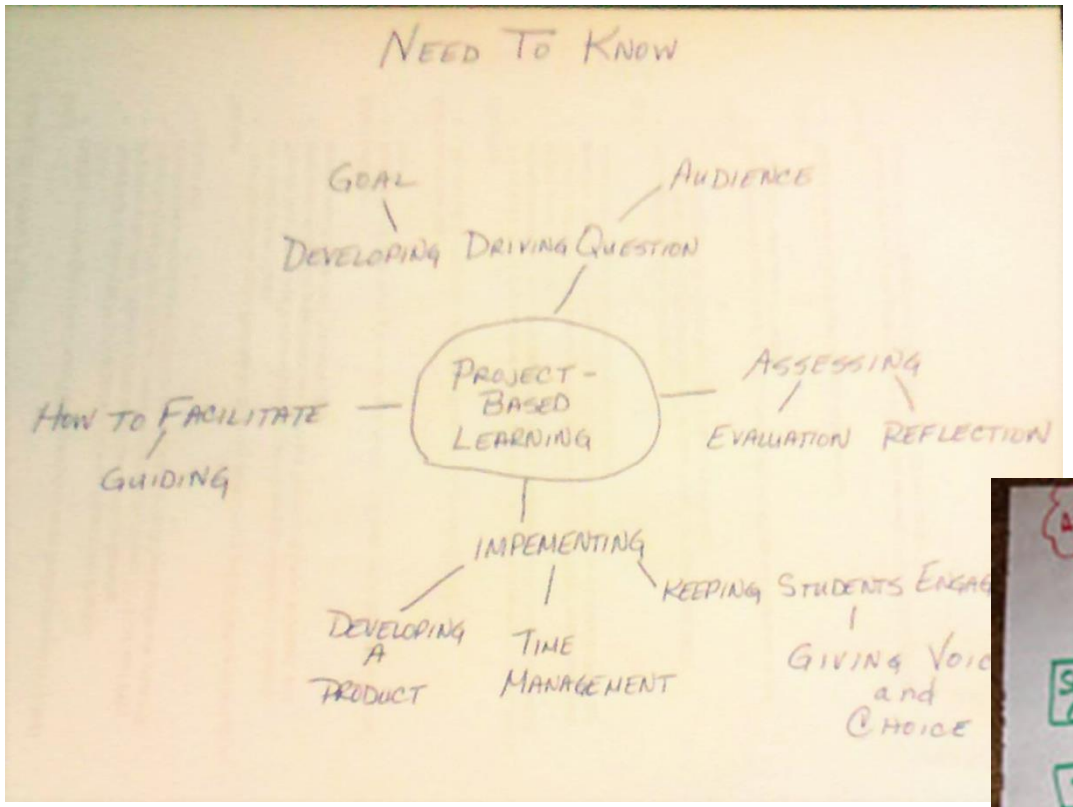
SAMPLE MAPS



UNTIL NEXT TIME…

- Go to the **Project-Based Learning Page on Y4Y, BE SURE TO LOG IN**

https://y4y.ed.gov/project-based-learning-hands-on-minds-on

- Project-Based Learning Module
- Links to Y4Y Resources
- Discussion Board: Watch a PBL video on the Learn More Library (links are provided). Reflect on the three questions on the discussion board.

Office Hours Today: 2:00-3:00 PM Eastern

NEXT TIME…

- Review of what you shared during the week
- Topic: Crafting a Driving Question

Wednesday, October 26th: 1:00-2:00 PM Eastern

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Visit: www.y4y.ed.gov

YOU FOR YOUTH